



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/045,799	03/23/1998	HIDEYUKI HAYASHI		1410

7590

01/03/2003

SUGHRUE MION ZINN MACPEAK & SEAS  
2100 PENNSYLVANIA AVENUE N W  
WASHINGTON, DC 20037

EXAMINER

TAMAI, KARL I

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 01/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

## Application No.

09/045,799

## Applicant(s)

HAYASHI ET AL.

## Examiner

Tamai IE Karl

## Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10/28/02.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6, 9-14, and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) 24-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-14 and 21-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 1998 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Newly submitted claims 24-26 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the apparatus can be made by other materially different methods such as: without stamping the sheet metal or without cutting the wires.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 24-26 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Specification***

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: end portions of the wires.

***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the end portions of the wires, the deformation preventer being flush with the end portion, and the vertical and horizontal extension of the deformation preventer must be shown or the features canceled from the claims. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-6, 9-14, and 21-23 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The specification does not have a full, clear, concise, and exact written description of the end portions of the wires, in fact the specification does not have any written description of the end portions of the conductors or the deformation preventer being flush with the end portions of the conductor.

In regards to claim 21-23 the specification does not have a written description of the deformation preventer extending vertical and horizontal to the top and bottom surfaces of the conductor or the end portions of the wires. The examiner will assume the vertical and horizontal directions are along traverse across the wire and along the longitudinal edge (as shown in Peterson), but there is no support in the specification for the deformation preventer extending vertical and horizontal to the conductor.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-6 9-14, and 21-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims do not particularly point out and distinctly claim the metes and bounds of the invention because it is unclear what constitutes the "end portion" of the wires.

***Claim Rejections - 35 USC § 102***

8. The rejection of Claims 1-4 under 35 U.S.C. 102(b) as being clearly anticipated by Waratani et al.(Waratani)(JP 4-64414) is withdrawn.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waratani et al.(Waratani)(JP 4-64414) and Peterson et al. (Peterson) (US 4,954,872). Waratani teaches a conductor with an outer frame 16 and a wiring section 1, where the

wiring section having a deformation preventer 2 under the resin 3. The deformation preventer extends along the flat end portion of the wires so as to extend between the wires and prevent deformation when the second resin (coating of claim 21) is applied to the wires. Waratani teaches every aspect of the invention except the deformation preventer flush with the edge of the wire. Peterson teaches the deformation preventer flush with the longitudinal end of the wire to prevent deformation of the wires during molding. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the insert conductor of Waratani with the deformation preventer flush with the wires as in Peterson to prevent deformation of the wires during molding.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Waratani et al. (Waratani)(JP 4-64414) and Peterson et al. (Peterson) (US 4,954,872), in further view of Huber. Waratani and Peterson teach every aspect of the invention, as discussed above, except the insert conductor and plastic plate deform preventer used in as a connector in a brush holder. Huber teaches an insert conductor molded in a brush holder. It would have been obvious to a person skilled in the arts at the time of the invention to construct the insert conductor of Waratani and Peterson in a brush holder because Huber teaches that insert conductors with are molded into brush holders to form an integrated body.

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Waratani et al. (Waratani)(JP 4-64414) and Peterson et al. (Peterson) (US 4,954,872), in further view of Yoshida. Waratani and Peterson teach every aspect of the invention, as discussed above, except the deformation preventer composed of polyphenylene sulfide resin. Yoshida teaches that polyphenylene sulfide is used in integrated circuits as an insulating layer. It would have been obvious to a person skilled in the art at the time of the invention to construct the insert conductor of Waratani and Peterson with the deform preventer made of polyphenylene sulfide resin because Yoshida teaches that polyphenylene sulfide resin provides good adhesion and a firm adhesive property, and because it has been held that it is within the ordinary skill in the art to select a know material on the basis of suitability for the intended use (see *In re Leshin*, 125 USPQ 416).

13. Claims 9-11, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's admitted prior art and Waratani et al. (Waratani)(JP 4-64414). The Applicant's admitted prior art teaches every aspect of the invention, as discussed above, except an insulating member to prevent the conductor from being deformed by resin injection during the resin molding. Waratani teaches an insulating member 2 applied to both surfaces of the conductor to prevent the conductor from being deformed by resin injection during the resin molding. It is inherent that the longitudinal deformation of the wires is prevented by connecting adjacent wires with insulator 2, where the insulator extends across the wire and along the wire (vertical and horizontal).

It would have been obvious to a person skilled in the art at the time of the invention to construct the brush holder of the Applicant's admitted prior art with the premold of Waratani to support the conductor within the resin mold during the injection molding process.

14. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) and Waratani et al.(Waratani)(JP 4-64414), in further view of Huber. AAPA and Waratani teach every aspect of the invention, as discussed above, except the insert conductor and plastic plate deform preventer used in as a connector in a brush holder. Huber teaches an insert conductor molded in a brush holder. It would have been obvious to a person skilled in the arts at the time of the invention to construct the insert conductor of AAPA and Waratani in a brush holder because Huber teaches that insert conductors with are molded into brush holders to form an integrated body.

15. Claims 14 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art(AAPA) and Waratani et al.(Waratani)(JP 4-64414), in further view of Yoshida. Waratani and AAPA teach every aspect of the invention, as discussed above, except the deformation preventer composed of polyphenylene sulfide resin. Yosihida teaches that polyphenylene sulfide is used in is used in integrated circuits as an insulating layer. It would have been obvious to a person skilled in the art at the time of the invention to construct the insert conductor of AAPA and Waratani with



Application/Control Number: 09/045,799  
Art Unit: 2834

Page 8

the deform preventer made of polyphenylene sulfide resin because Yoshida teaches that polyphenylene sulfide resin provides good adhesion and a firm adhesive property.

### ***Response to Arguments***

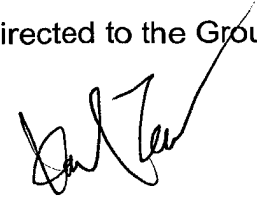
16. Applicant's arguments filed 10/28/02 have been fully considered but they are moot in view of the new grounds of rejection.

The Applicant's argument that the deformation preventer is flush with the end of the conductor is not persuasive. The limitation is new matter because there is no support in the specification or the drawings for the limitation of the end of the conductor or the end being flush. The Applicant's arguments regarding claims 9-14 are not persuasive because the end being flush has not been claimed.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (703) 305-7066.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (703) 308-1371. The facsimile number for the Group is (703) 305-3432. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Karl I Tamai  
PRIMARY PATENT EXAMINER  
January 2, 2003



**KARL TAMAI  
PRIMARY EXAMINER**